

## Assignment 6: Adding Functionality to a Website with Javascript

05-430 Section A

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### Links

Live Site: [https://rachelwtlee.github.io/pui/homework\\_6/index.html](https://rachelwtlee.github.io/pui/homework_6/index.html)

Repository: [https://github.com/rachelwtlee/pui/tree/master/homework\\_6](https://github.com/rachelwtlee/pui/tree/master/homework_6)

### Challenges and Bugs

#### 1. *Displaying and Formatting Checkout Item Cards*

I had initially really struggled with populating the checkout page with selected item cards. While I knew I had to retrieve the stored values for the cinnamon roll that the user had selected, I was not sure how to format and display this information. When logging the user selected values into the console, I could see that multiple arrays were being generated, but I needed to find a way to format the cards to contain this information. Looking over the content we covered in labs, I realised that this could potentially be achieved using for loops for the length of the array, and this method would allow me to consolidate the relevant data.

From a visual perspective, after looking through past lab exercises and slides, I came across the 'appendChild' concept which I was able to understand better after mapping out how the HTML elements for these cards might be formatted on paper, and working backwards. Using variables also made the data to be called more palatable and easier to work with.

#### 2. *Deleting Checkout Item Cards*

In HTML, CSS and even jQuery, I was familiar with 'deleting' items by hiding them using the 'display: none' property. However, I soon came to realise that the conditions of this assignment were different, as the cards that I wanted to delete were dynamic and created by users, as opposed to the hard coded data I was used to working with. I knew the data was drawn upon and stored in my 'cart' array, and so the next logical step was to understand how to remove the data from the array. I came across the 'splice' concept, and was able to understand how to call upon the array and remove the relevant object values upon clicking the delete button. For a while the relevant cards would only be removed from the checkout page after refreshing the page, but after walking through my code with a friend she helped me realise that the new array data needed to be saved and updated again for changes to be seen.

## Programming Concepts

1. The first programming concept I learned was using local storage. In my website, I used local storage to save the values of user customised buns (e.g. pumpkin spice cinnamon rolls with variations of frosting, number of rolls and price) into an array. Later, I used local storage to retrieve this data and use it across pages, such as updating the shopping cart count and populating item cards in the checkout page.
2. I learned how to apply constructor functions to my code. One example of how I applied these functions was to update the price, quantity and frosting objects for the customised cinnamon roll selection on click.
3. While I had previously known about the DOM and how to manipulate it, I had only ever set output values as fixed values. Through this project I was able to learn how to populate elements with many kinds of data. For example, Populating the text content of the checkout counter with my stored and updated cartLength variable.
4. Through this project, I gained a deeper understanding of arrays, especially with regard to calling different objects within arrays. One instance where I demonstrated this was populating the item cards in checkout with the right string details which were locally stored in arrays. To call the array objects, I used a for loop to retrieve the 'ith' array, and the specific object number stored in the array (e.g. `cart[i][2]`).
5. Another concept I learned was how to create new elements through Javascript. Previously, I thought elements such as divs, text nodes, images etc. could only be populated through HTML; however, I learned that this could also be done through Javascript. I also learned about 'append child', which I used to put individual elements such as images and text blocks into a single div that would house the bun item cards on the checkout page.